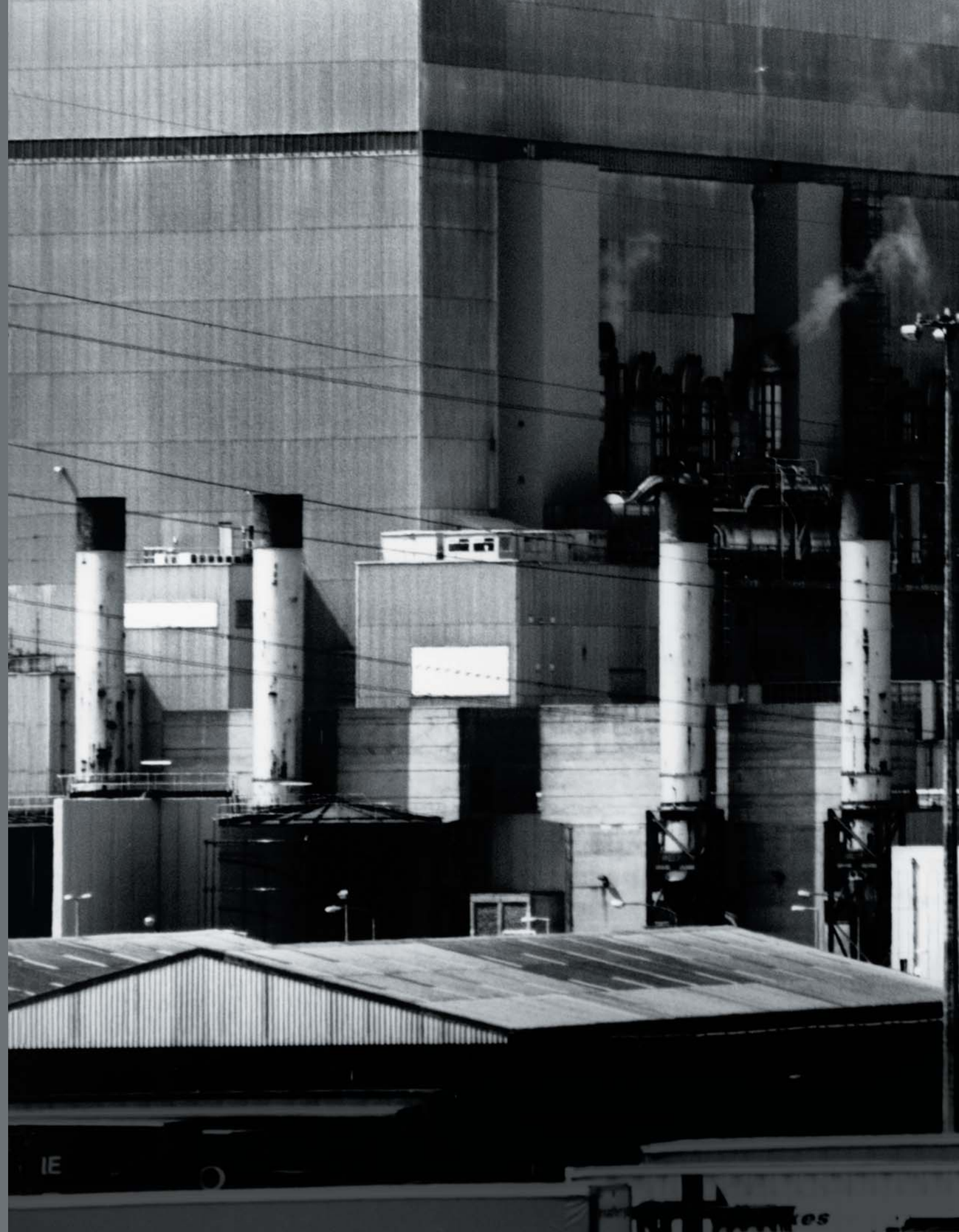
CARBON COUNTING

WELCOME TO THE 21ST CENTURY, AS TEMPERATURES BEGIN TO RISE AND A SWELLING SEA THREATENS FLOODING AND DISRUPTION. IN CARBON COUNTING, **IAN HERBERT** TAKES US THROUGH THE IMPLICATIONS OF CLIMATE CHANGE, HOW A STORMIER, WETTER, WARMER FUTURE IS SET TO IMPACT ON ALL OF OUR LIVES. THEN HE LOOKS AT THE ROLE ENGLAND'S NORTHWEST COULD PLAY IN BRINGING ABOUT A REVOLUTION IN RENEWABLE ENERGY. **STEVE CONNOR** FOCUSES ON TRANSPORT AND HOW THE TIME HAS COME TO DITCH OUR LOVE AFFAIR WITH THE CAR AND OPT FOR THE MASS TRANSIT SYSTEMS THAT COULD CURB OUR USE OF FUEL.

The sands of Formby stand at risk. Photo by Jan Chlebik.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THE MERCURY IS RISING AS HUMANKIND'S LOVE AFFAIR WITH FOSSIL FUELS DELIVERS A HIKE IN TEMPERATURES AND A MAJOR CHANGE IN CLIMATE. FOR ENGLAND'S NORTHWEST THE CHALLENGE IS ON TO ADAPT TO A WARMER, WETTER, STORMIER FUTURE AND CHANGE THE WAY WE USE, AND PRODUCE, OUR ENERGY.

WORDS BY **IAN HERBERT**. IMAGES BY **JAN CHLEBIK**.

CARBON COUNTING

For a city with an unenviable reputation for cold, wet weather, Manchester could be forgiven for thinking that the long range forecast offered by regional scientists a few years ago was some kind of practical joke.

Prepare for Mediterranean summers, the city was told. Plant some extra deciduous trees to provide public shade. Construct pavements that can withstand high temperatures. Challenge your own preconceptions about the modern, continental city you aspire to be. Café bars might be high on Euro chic but they're not so comfortable during summers that, by 2040 or 2050, could be 2°C warmer. Their metallic surfaces and floors reflect the sun and heat, which will be trapped by tall city buildings - the urban 'heat island' effect. The sustainability of lawns, parks and flowerbeds is also questionable in sweltering summers. In winter, flooding will be more commonplace, and fierce storms can be expected off the Atlantic.

These ideas were not the apocalyptic imaginings of a fringe environmental group. Presented at a conference staged by the multi-sector Northwest Climate Group (NWCG) to help tourism leaders plan for climate change, they flowed out of the UK's first regional study on the commercial and environmental effects of climate change, carried out in the Northwest four years ago. And though their accuracy cannot be entirely precise - the exact effects and scale of climate change in the next 50 years remain uncertain - there is no doubt that these changes are not just to do with the future. The effects of a warming world are already vividly visible all around us. Glaciers are shrinking, permafrost is thawing, ice on the sea, lakes and rivers is freezing later and melting earlier, and plant and animal behaviour is changing, with some species extending their ranges towards the poles and others declining. There are earlier dates for trees coming into leaf, insects emerging, and birds laying their eggs. The absence of cold mornings and increase in hot days are certainly no figment of our imagination.

In the summer of 1995, Northwest factory staff needed breaks and cold drinks every 25 minutes to rehydrate in the hot and humid conditions as Central England baked through 26 'hot days', when the mean temperature for 24 hours was above 20°C. Summer 1995 saw the highest total of hot days since records began in 1772. This kind of summer could occur every five years by 2050, according to projections published in April 2002 by the governmental UK Climate Impacts Programme (UKCIP).

Such are the uncharted waters into which our climate has shifted in the last 12 years, a period in which we have experienced the equal warmest year (1998), ten of the warmest years on record and twice as many 'hot' days as the preceding decades of the 20th Century put together.

It seems increasingly likely that humanity must take the blame for all of this. The Intergovernmental Panel for Climate Change (IPCC), a body set up in 1988 to advise governments on the latest science of climate change, recently concluded that 'most of the warming observed over the past 50 years is likely to have been due to the increase in greenhouse gas concentrations.' It was a far clearer attribution of the warming to human activities than their stance five years ago, when the panel stated that 'the balance of evidence suggests a discernible human influence on global climate.'

Our contribution to climate change comes through the burning of fossil fuels that generate energy for transport, domestic and industrial use; we pump out greenhouse gases into the bargain. These greenhouse gases are building up, with emissions doubling between 1965 and 1998 as our hunger for oil, gas and electricity grew: during the last 50 years of the 20th Century, our emissions of greenhouse gases grew at twice the rate of our population.

The end result has been an increase in rainfall and water levels and the crippling floods Britain has experienced in the last three years. NWCG figures show the cost of weather - related damage to UK insurers in 1999 was £861 million, with 1.2 million properties in the UK at risk from flooding and many households (usually the socially excluded) not insured. At an international climate conference in The Hague, two years ago, Deputy Prime Minister John Prescott jabbed his finger into a large sandbag on the podium in front of him. "This is the way of things to come - a wake-up call for many people about the reality of climate change," he said.

There's been a notable urgency about all of this in England's Northwest, where a response to climate change has been developed and piloted by NWCG - the UK's first regional climate change body, established under the aegis of Sustainability Northwest after the first regional colloquium on climate change in 1997. This body's 1998 study of the impacts of climate change spawned a new sophistication in planning for climate change. Warmer summers could also represent a commercial opportunity, NWCG suggested. They would bring a new lease of life for the seaside towns like Blackpool and Morecambe which, given the guarantee of sunshine, may begin attracting trade from the continental visitors.

But it has always been clear that the threats far outweigh the benefits. Dr Simon Shackley, a scientist from the Tyndall Centre for Climate Change in Manchester whose research was integral to NWCG's 1998 report, now considers increased flooding on vulnerable, low lying rivers like the Mersey and Lune and coastal strips one of the gravest threats. "Sea wall barriers could help, but building them will destroy precious habitats," he said. "It's a quandary."

Right: One of Europe's most important habitats for migratory birds, Formby's sands are at serious risk with sea levels set to rise by up to 67cm.

Businesses are also awaking to the difficulties, though their puzzlement when Dr Shackley first approached them illustrated how far away they once considered climate change to be. "They face the prospect of those 1995 heat fatigue problems becoming an annual commonplace among staff," said Dr Shackley. "Most buildings conform to 1960s climate models, established when there was no need for buildings to be cool. Installing air conditioning might be a solution for wealthy, value-added industries of the South East but it is a different proposition for some in the Northwest, with vast open buildings."

Preparing for the changes - by reducing our vulnerability and making the most of the benefits - is just a small part of the strategy.

NWCG has also helped establish a greater understanding of the key plank of any strategy to tackle greenhouse gas levels - replacing fossil fuels with energy harnessed from the elements: renewable energy (RE). After a regional inventory of greenhouse gas emissions, last year NWCG oversaw a first assessment of RE potential in the Northwest, which established a target that 8.5 per cent of all energy output should be by RE by 2010 - an increase in capacity of 650 per cent in just nine years.

There is a vast natural resource to help reach that goal: Cumbria and North Lancashire's high wind speeds, mountainous landscapes and long expanses of coastline offer greater wind power potential than most parts of the UK. There are also some visionary environmentalists ready to harness them. These include Karl Slater, a Cumbrian farmer who took a good look at his 200 acres of land 12 years ago and decided he wanted wind turbines out there, converting the seven metres per second winds which whipped across his fields into an electricity supply. It sounded like some over-enthusiastic Greenpeace vision statement and he didn't find help immediately: it took six years. A sum of £10,000 was demanded for a feasibility study and it was only after he had registered his interest in wind power on a database that a Swedish company contacted him, found the location appealing and proposed a community owned wind power model, akin to many in Sweden. The Baywind Co-operative was established.

"That's when it became clear that he wasn't alone," said Annette Heslop, who is secretary of the Baywind Co-operative that Slater helped to launch. "After 150,000 mailshots and a few newspaper ads, he had found 1,300 people to invest anything from £300 to £20,000 in the same idea. Some of these people never expected to see their money again - they invested for the environment. But we're in our sixth year and still looking to grow."

The two turbines that the Cumbrians' collective £1.2m investment bought have become today's Harlock Hill wind farm at Pennington. A second share offer in 1998/99 raised a further £670,000 to buy a turbine at the Haverigg II wind farm site. And as Baywind's efforts have prospered, increasingly tangible evidence of global warming has delivered political impetus.

THE IMPORTANCE OF RENEWABLE ENERGY

to the planet was enshrined in the pivotal UN treaty drawn up at Kyoto, Japan, five years ago, which required developed countries to reduce their collective greenhouse gas emissions by 5 per cent on 1990 levels by 2008-2012. With the potential for instability in the Middle East also increasing the need to lessen dependence on imported oil and gas, a key energy review produced by the Performance and Innovation Unit (PIU) of the cabinet office in February 2002 took the targets a step further, tasking Britain to generate 20 per cent of its energy through renewable sources by 2020. That's double the statutory 'renewables obligation' of 10 per cent by 2010 which already places the onus on fuel companies to go green (the Government has not yet committed to the PIU target).

The Northwest has some major technologies to draw on. There are already eight offshore wind power sites in progress, from the Solway Firth to Liverpool Bay, and five small-scale hydro-electric sites. There is also plenty of scope for biomass - the practice of producing energy by burning coppiced willow and miscanthus grass crops - though there is as yet nowhere for crops to be burnt. Farmers, in need of new means of diversification and revenue generation after foot and mouth, are currently being asked to consider biomass as a new form of business.

Other potential RE sources like photovoltaics and solar water heating are in need of nurture as the payback time on the investment does not currently offer a good return. This process is the mission of another pioneering green partnership - Renewables Northwest - a body established by United Utilities, the Northwest Development Agency, Envirolink Northwest and Sustainability Northwest and dedicated to promoting the development of the region's RE potential. In the last six months, consultants have been commissioned to look at RE supply chains and assess how the cluster of RE companies can grow and feed on the science and technology base, particularly in the region's universities.

However, the greatest impediment to the development of the biggest immediate source of renewable energy - onshore wind power - is something far more prosaic than technological development. It is an old British sensitivity about the twirling wind power blades - which might be objects of aesthetic grandeur to some people but are evidently a blot on a landscape to many others.
The reticence about them goes a long way to explaining why the UK is a decade behind most other EU countries in exploiting wind power, despite the fact that it has the greatest supplies of wind and wave energy on the continent. Germany has built 15 times the wind energy capacity of the UK, and this clean, cheap and renewable source accounts for just 0.38 per cent of our energy, compared with 18 per cent in Denmark. That's an achingly slow pace of development.

Britain's first regional renewables conference, held in Manchester this Spring, compared the relatively enlightened attitude of Scotland with the municipal parochialism in England which is holding RE back. The conference heard how 22 per cent of planning applications for wind farms are approved in England and Wales, against 41 per cent in Scotland. Of the 50 firm proposals for Cumbrian wind farms lodged since 1990, just 12 have yielded operating ventures. The chairman of the Northwest Regional Development Agency, Mike Shields, said that England's 'far more lukewarm' planning policy guidance was a key contributory factor.

Guidance notes for planners in England and Wales state that renewable energy 'offers the hope of increasing diversity and security of supply' - a long way from Scottish guidance which states: 'Planning policy is based on the principal that renewable energy developments should be accommodated throughout Scotland.' Advice relating to England needs to be 'radically re-appraised', Mr Shields told the conference.

Scotland's apparently enlightened approach to wind power has been highlighted by broad local support for what would be the world's largest wind farm on the Hebridean island of Lewis, where Amec and British Energy plan to invest £600m to build 300 turbines. Baywind, by contrast, has been consistently thwarted by planners. Several of its projects have been rejected outright and, at the time this publication went to press, an eight-turbine project at Wharrels Hill in Allerdale, was the subject of a planning inquiry.

Half of Northwest England's off-shore wind power capacity is also on hold. Plans by four major power firms - Shell, British Energy, Powergen and Scottish Power - for three large offshore wind farms close to Blackpool and another off Southport have been blocked by the Ministry of Defence, which says the turbines will interfere with radar testing the Eurofighter craft being built at Warton, Lancashire.

In Wales, a £30m project in Denbighshire has been dismissed on environmental grounds and the huge Cefn Croes windfarm, in the Cambrian mountains of mid Wales, likened to the Taleban's destruction of ancient Buddhist statues by the Bishop of Hereford. With its own higher targets of 18 per cent renewable supplies by 2010 and consultation on a 30 per cent target by 2020, Scotland appears to be accelerating ahead on the use of non fossil fuels. Scotland's intent has already prompted investment by Vestas, the Danish wind turbine company.

"Scotland is roaring ahead, with the political support of the Scottish executive," said Chris Shearlock, Renewables Development Manager at Envirolink Northwest, which is coordinating efforts to advance exploitation of renewable supplies. "As well as the many English projects rejected, there are countless more which are not put forward on the basis of negative feedback. We liaise with a lot of planning officers who are told by councillors that wind farm applications should not come before them." The Northwest's 2001 RE study recommended that a more strategic approach to selecting sites - identifying them on a regional and local basis instead of expecting developers to guess which might be best - would help overcome the planning obstacles.

There are other mountains to climb for RE. Wind farms like Baywind's are also unfairly penalised by the national grid for being unable to predict their output. Turbines spin only when the wind blows, of course, and cannot be used in very high winds.

Previous page: Coastal defences will need strengthening for the windier, wetter and warmer future.
Right: Wind energy is viewed by many as one of the great industries of the future: one which the Northwest is well placed to dominate.

But the Government's quest for quick, increased renewable output may at least give RE operators a leg up in the struggle against municipal opposition. Energy Minister Brian Wilson unilaterally approved Cefn Croes this May without sending it to public inquiry and despite opposition from the Welsh Assembly. "Some of these projects have got to start getting through and it seems that the Government is ready to force the pace," said Mr Shearlock.

THE REALM OF COMMERCIAL INNOVATION ALSO SEEMS BOUNDLESS when it comes to RE supplies. Witness award-winning architect Terry Farrell's new £130m Macintosh urban village in Manchester, which includes a windmill to harness wind energy and integrated photovoltaic cells. The project's 'green buildings', which include 710 apartments, a 120-place pre-school nursery and a GP's surgery, will also achieve a 75 per cent reduction in greenhouse emissions in manufacture, construction and operation. It is, said Mr Farrell, "one of the most advanced ecological residential developments in Britain."

Meanwhile the Manchester Ship Canal, the Victorian engineering feat which brought the city its industrial prosperity, is providing hydropower at the Barton Dock generator, which illuminates the Co-operative Bank's HQ. At the Renewables Northwest conference in Spring 2002, United Utilities chief executive John Roberts announced a further hydropower station on the Ship Canal making it the most significant canal for the production of RE in the UK, with an electricity-generating capacity of over 1.7 megawatts.

Dr Simon Shackley is not getting carried away though, since renewable energy is nothing like a panacea for reduction in greenhouse gases. Even a colossal increase in RE - something mirroring the 60 per cent target by 2050 recommended by a UK Royal Commission on climate change - would only stabilise carbon levels in the atmosphere, at best. If humanity continues to emit greenhouse gases the way it does today, carbon dioxide levels will certainly reach double their pre-industrial levels well before the end of the century, increasing the average global temperature by between 1.7 and 4.3°C.

"Greenhouse gases are a moving target," said Dr Shackley. "In the last 10 years there's been a 20 per cent increase in domestic electricity consumption."

Furthermore, the nation responsible for a quarter of all carbon dioxide emissions - the United States - refuses to either sign up to the Kyoto Treaty or to limit its output by the merest fraction. Despite the IPCC's immutable evidence of global warming and humanity's contribution to it, President George W Bush has cited doubts about the science of climate change as justification for his refusal to impose on the American economy the cuts in industrial gases which Kyoto requires - and which the US signed up to at the original treaty agreement in 1997.

That leaves many other nations grappling with the conundrum of how to reduce emissions in degrees which can make a difference.

Reducing carbon emissions by imposing economic intervention is another part solution, though it can be a problem in a real world where governments face elections, according to Dr Shackley. "Raising the price of petrol can lead to a reduction in consumption, partly as a result of people reverting to public transport, partly by people switching to cars with smaller engines," he said. "But witness last year's fuel protests. It doesn't go down well. We need investment in research and development for technical fixes, it may even be something like nuclear power, or carbon sequestration. There's a basic principle - that only through international collaboration will it be possible to succeed in addressing the problems we face with the vigour we need."

An apocalyptic IPCC report last year spelled out the catastrophic consequences of failure with more confidence than ever before. As if flooding and the failure of food supplies were not enough, it showed that a greatly increased danger of disease may accompany them. That means a significant rise in the numbers of people exposed to vector-borne diseases such as malaria and dengue fever, and water-borne diseases such as cholera, which already impinge on up to 50 per cent of the world's population. Most importantly, these new stresses will all be imposed on a world already under great strain from massive population growth, poverty and pollution.

Can there be a more chilling incentive to take action?

STABILISING OUR CLIMATE IS ABOUT MORE THAN JUST FLICKING OFF SWITCHES, PUTTING UP TURBINES AND TURNING DOWN THERMOSTATS - IF WE WANT TO MAKE REAL CUTS IN GREENHOUSE GASES THEN WE NEED TO TACKLE OUR SEEMINGLY IRREPRESSIBLE LOVE AFFAIR WITH THE CAR.

WORDS BY **STEVE CONNOR**. IMAGES BY **JAN CHLEBIK**.

CHANGING TRACKS

"Beam me up, Arthur, I've got a meeting at the photovoltaics production plant in St. Helens and I'm stuck on the service platform for Barrow's 400-turbine offshore wind farm…" The day may well come when taking a trip is as simple as making a phone call, but if you park to one side even near-future innovations like hydrogen fuel cells, the reality today of getting from A to B is an all too familiar mixture of gas-guzzling motors and the hot tarmac of congested roads.

Climate change, congestion and visual or acoustic intrusion present a pressing case for curbing our love affair with internal combustion. Our 'areas of tranquillity' are being eroded. Respiratory complaints, particularly in children, are on the rise. Eye irritations and photochemical smog are making life less comfortable. The planet is warming up.

Road transport is the UK's fastest-growing source of carbon dioxide and in England contributes around one-fifth of all our greenhouse gas emissions. Over the next 30 years, traffic levels are expected to climb by a staggering 87 per cent, a growth rate that will negate the positive moves towards cleaner fuels and more efficient vehicles.

Nationally, the transport brief has claimed one major ministerial scalp recently and is considered by those who stalk the corridors of power to be the most poisoned of chalices, but Government policy, in the form of a 1998 white paper and a 2000 ten-year plan, does make some clear statements of intent, including a commitment to developing Local Transport Plans, planning reforms, road charging, 'quality partnerships' to improve bus services, green transport plans, the promotion of walking and cycling, and pilot projects on motorway charging.

So with no shortage of Blairite jargon on the table and with a plentiful helping of reforms to sate our hunger, can we expect to see transport transformed in the years ahead? Costed pledges in the ten-year transport plan do promise improved public transport. £180 billion was identified for investment over ten years, with £60.4 billion earmarked for rail network improvements.

Planners have as much a part to play as policy makers. A specific piece of planning guidance handed down in October 1999 (PPG13) called on developers to focus large generators of travel - shopping centres or community facilities for example - closer to major public transport interchanges and to make sure that local transport facilities are within cycling or walking distance of those that want to use them.

For England's Northwest the Regional Planning Guidance (RPG), in its final round of public consultation throughout the summer of 2002, calls for a more sustainable approach to transport planning. "For us, the key issues for transport include freight movements, demand management on our road and rail networks, and the accessibility of public transport," says Tim Hill, who led the NWRA planning team, "The priorities that we've already agreed include dealing with bottlenecks and congestion around the Manchester transport 'hub', and the need for action on improving and developing transpennine routes."

Policy commitments and planning constraints sound all very well, of course, but is anything practical being done to improve public transport and bring about a gear-shift in our travel patterns? A quick survey across the region highlights some promising beginnings. In Cheshire a sustainable transport strategy has been included as part of the County's new structure plan and the city of Chester has developed 'Greenways' for cyclists and pedestrians, as well as new park and ride schemes and a well-regarded light rail system. Stockport has conducted a 'Great Transport Debate' and, through its Local Agenda 21 programme, created a Sustainable Transport Alliance that includes the NHS and a local college.

The Government's Capital Challenge fund has brought £18 million into the region for schemes designed to boost public transport and reduce our dependency on the car, with beneficiary projects including the Metrolink in Manchester, segregated busways in Chester and the expansion of Merseytravel's SMART hi-tech bus network.

Manchester's Metrolink and Merseytravel's burgeoning network have already paid off financially and in social and environmental terms. Merseytravel are well on their way to gaining an ISO14001 environmental management standard and an award from the Commission for Integrated Transport. Metrolink has gained plaudits, too, not least for taking 17.2 million people per year off the roads and onto the rails, saving around 3,600 tonnes of carbon dioxide into the bargain.

A boost for buses and long-overdue investments in rail may go some way toward cutting our car use, but for short, often urban journeys of less than 2 or 3 km, it may be peddle power that has to take over. A strategy for cycling in England's Northwest, entitled Better by Bike and published by a Groundwork-led partnership, called on local government and business to help build on the 16,000 km of National Cycle Network (NCN) in the region. From Carlisle to Kendal to Liverpool and Macclesfield the strategy highlights the 1,400 km of NCN that will be developed in the region and, through a major mapping exercise, identifies a further 1,900 km of cycleways that should be built in addition to the NCN routes.

As with so many other transport improvements, Better by Bike shows that there are plenty of good projects that could be replicated. In Cumbria, for example, there has been a countywide cycleway for more than 20 years, which is at present being upgraded with £1.4 million per year earmarked for cycleway development. There is also a Coast-to-Coast cycleway that can take riders from West Cumbria and the Irish sea to the North East; each year the route brings in more than £1 million in tourist income as an impressive 10-15,000 people complete the route.

LETTING THE TRAIN TAKE THE STRAIN

or using a bicycle for the 'round-the-corner' shopping trip are the kind of shifts in behaviour that Government and campaigners alike want to see more of. But one sobering statistic when it comes to transport and climate change was released recently by a group led by Friends of the Earth: a return flight from the UK to Florida will belch out as much carbon dioxide as the average British motorist produces in an entire year, in spite of the fact that planes are, today, twice as efficient as they were 20 years ago.

Given that our passion for overseas holidays looks set to grow unabated - experts are predicting a doubling of air passengers in the next 15 years - the challenge for airlines is to hike up that fuel efficiency ever higher, look for alternative fuels and work to offset their emissions. Getting the environmental cost of air travel down is of singular importance for England's Northwest given the economic and social importance of our slice of the burgeoning international travel market: Manchester Airport.

Business is booming at the Airport. A second runway opened in 2001 and it now looks after a massive 18 million passengers each year. Ninety-five airlines now fly from the Airport to more than 170 international destinations. In 1999 the airport generated £1.7 billion in economic activity - of this, £585 million remained in the Northwest; it is also responsible for creating a total of 33,000 jobs in the region. The airport has stated aims regarding its social responsibility and impact: it works with local schools and colleges on skills development and mentoring and is the lead company in the Wythenshawe Education Action Zone.

So the Airport gets brownie points on economic and social grounds, but the second runway was a controversial development, with green campaigners and local residents conducting a spirited, if unsuccessful, attempt to get the development blocked. In its defence, the Airport cites its public consultation, natural habitat management and runway design as some of the factors actively considered to make the runway's development as benign as possible. There was a £17 million package of environmental works to accompany the runway, extending across 350 hectares of land. Ancient woodlands and grasslands were relocated, as were 30,000 amphibians, bats and badgers.

On climate change there is plenty the Airport can and is doing to cut emissions as we await fuel-saving reforms from the airlines. Each day more than 50,000 vehicles travel to the Airport, making congestion and traffic management a very high priority. In 1992 a target was set to increase the number of public transport trips to the Airport to one in every four of all journeys. At the time the figure was more like one in every 20. The Airport's on target to hit that 25 per cent figure, with public transport accounting for 18 per cent of journeys in late 2001.

For the Aiport's planners, though, the development of better rail links in particular returns us to a perennial problem for the region - the improvement of the West Coast Main Line and our Transpennine routes. Used by 54 million people per year, the rail system is in sore need of investment and the cost of upgrading West Coast Main Line alone is estimated at £5.8 billion.

One symbol stands testimony to the need for action on rail. Outside Manchester's Piccadilly station sits a large, blue corrugated shed, forlorn and unused. Daubed across its side in French are the words 'L'Eurostar habite ici'. It doesn't, of course, and it never has. The Eurostar, and a promised two-hour trip to London, are still in the shunting yard awaiting further investment. For the region that put railways on the map back in the steam-powered 1830s, the terminal delay in getting faster, more frequent trains running to London and mainland Europe is more than an inconvenience: until we get the transport system that business and the public need and expect, getting people out of their cars will be a thankless and often futile endeavour.